

November 7, 2012

Ms. Ruth E. McBurney
Executive Director
Conference of Radiation Control
Program Directors, Inc.
1030 Burlington Lane, Suite 4B
Frankfort, KY 40601

Dear Ms. McBurney:

We have reviewed the final revision to Part T, *Transportation of Radioactive Material*, of the Suggested State Regulations (SSR), received by our office on September 6, 2012. These regulations were reviewed by comparison to the equivalent Nuclear Regulatory Commission (NRC) rules in 10 CFR Part 71.

As a result of our review, we have 12 comments that have been identified in the enclosure. Please note that we have limited our review to regulations required for compatibility and/or health and safety. We have determined that if these regulations are revised, incorporating our comments and without other significant change, they would meet the compatibility and health and safety categories established in the Office of Federal and State Materials and Environmental Management Programs (FSME) Procedure [SA-200](#).

Our review included the incorporation of equivalent NRC amendments issued prior to 2011. The following amendment still needs to be addressed in the next revision to Part T:

- “Advance Notification to Native American Tribes of Transportation of Certain Types of Nuclear Waste,” (77 FR 34194; June 11, 2012) that becomes effective on 8/10/2012 and are due for State adoption by 8/10/2015. RATS ID 2012-2.

The Conference of Radiation Control Program Directors (CRCPD) will need to resubmit Part T to address changes necessary for the implementation of this amendment. The rationale for the 2012 version of Part T should be revised to reflect that this version of Part T does not address the above amendment and that States considering an Agreement with NRC will need to address the comments attached as well as the above amendment to meet the compatibility and health and safety categories. Comments addressing areas that need revision with the 2012 amendment are included. We are not able to provide federal concurrence until the comments have been addressed and the above amendment has been incorporated and reviewed by NRC.

We request that when you revise your regulations to address our comments, a copy of the “as published” regulations be provided to us for review. As requested in FSME Procedure [SA-201](#), “Review of State Regulatory Requirements,” please highlight the location of any changes made by the CRCPD, in response to our comments and provide a copy to FSME.

If you have any questions regarding the comments, the compatibility and health and safety categories, or any of the NRC regulations used in the review, please contact Kathleen Schneider, State Regulation Review Coordinator, at (301) 415-2320 (Kathleen.Schneider@nrc.gov) or Dr. Janine F. Katanic, CHP, at (817) 200-1151 (Janine.Katanic@nrc.gov).

Sincerely,

/RA/

Brian J. McDermott, Director
Division of Materials Safety and State Agreements
Office of Federal and State Materials
and Environmental Management Programs

Enclosure:

Compatibility Comments

cc: Bruce Hirschler, OED, CRCPD

David Allard, PA, Chair
SSR Council, CRCPD

Earl Fordham, WA, Chair
SSR Part T Committee

COMPATIBILITY COMMENTS ON FINAL CRCPD PART T REGULATIONS

SSR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	T.2.	10 CFR 71.4	2004-1	[B]	<p>Definitions: “Criticality Safety Index (CSI)”</p> <p>The Part T definition of “Criticality Safety Index (CSI)” contains an incorrect reference in the last sentence of the definition. It states “described in T.10 and T.11” however the reference in the definition was not renumbered when T.8. was deleted in the latest revision of Part T. The reference should state “described in T.9. and T.10.”</p> <p>The Part T definition of “Criticality Safety Index (CSI)” does not include the required reference to §71.59 in the last sentence. The phrase “and 10 CFR 79.59” was added to the definition in the latest revision of Part T. However, this contains a typographical error and should refer to “10 CFR 71.59” not “10 CFR 79.59.”</p> <p>CRCPD SSR Part T, T.2., “Criticality Safety Index (CSI)” needs to make the above changes to meet the Compatibility Category B designation assigned to the 10 CFR 71.4, Definitions: “Criticality Safety Index (CSI).”</p> <p>Comment revised from September 22, 2011.</p>
2	T.2.	10 CFR 71.4	2004-1	[B]	<p>Definitions: “Deuterium”</p> <p>The Part T definition of “Deuterium” contains an incorrect reference. It states “for the purposes of T.4 and T.10.” It appears that the definition was not renumbered when T.8. was deleted in the latest revision of Part T. It should state “for the purposes of T.4 and T.9.”</p>

SSR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					CRCPD SSR Part T, T.2., "Deuterium" needs to be revised to make the above change to meet the Compatibility Category B designation assigned to the 10 CFR 71.4, Definitions: "Deuterium."
3	T.2.	10 CFR 71.4	2012-2	B	<p>Definitions: "Indian tribe"</p> <p>SSR Part T has not been revised to address the revisions in RATS ID 2012-2 and therefore does not include a definition for "Indian tribe."</p> <p>SSR Part T, T.2., Definitions, needs to be revised in order to meet the Compatibility Category B designation assigned to the 10 CFR 71.4, Definitions: "Indian tribe."</p>
4	T.2.	10 CFR 71.4	2012-2	B	<p>Definitions: "Tribal official"</p> <p>SSR Part T has not been revised to address the revisions in RATS ID 2012-2 and therefore does not include a definition for "Tribal official."</p> <p>SSR Part T, T.2., Definitions, needs to be revised in order to meet the Compatibility Category B designation assigned to the 10 CFR 71.4, Definitions: "Tribal official."</p>

SSR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
5	T.4.d.	10 CFR 71.13	2004-1	B	<p>Exemption of physicians</p> <p>The last sentence of T.4.d. contains identical language to the NRC regulations, but does not include the reference to Part G. Part T should be revised to read “licensed under Part G, 10 CFR Part 35, or equivalent Agreement State regulations.”</p> <p>CRCPD SSR Part T, T.4.d., needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 71.13.</p> <p>Comment stands from September 22, 2011, letter.</p>
6	T.9.	10 CFR 71.22	2004-1	[B]	<p>General license: Fissile material</p> <p>Part T, T.9.c.i., states “contain less than a Type A quantity” whereas NRC’s regulation states “contain no more than a Type A quantity.” NRC’s regulation allows a Type A quantity or less whereas Part T only allows less than a Type A quantity.</p> <p>CRCPD SSR Part T, T.9.c.i., needs to make the above change in order to meet the Compatibility Category B designation assigned to 10 CFR 71.22.</p>

SSR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
7	T.10.	10 CFR 71.23	2004-1	[B]	<p>General license: Plutonium beryllium special form material</p> <p>Part T, T.10.c.i. states “contain less than a Type A quantity” whereas NRC’s regulation states “contain no more than a Type A quantity.” NRC’s regulation allows a Type A quantity or less whereas Part T only allows less than a Type A quantity.</p> <p>There is an “; and” missing between T.10.e.i. and T.10.e.ii.</p> <p>CRCPD SSR Part T, T.10., needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 71.23.</p>
8	T.14.	10 CFR 71.87	2004-1	[B]	<p>Routine determinations</p> <p>In the previous editorial comment from the September 22, 2011 letter, staff noted that CRCPD incorporates the language from DOT 49 CFR 173.443 instead of referencing the DOT regulations.</p> <p>Part T, T.14.i., does not provide the reference to 49 CFR 173.443, but instead provides some of the text of the requirement in 49 CFR 173.443 and provides the table from that requirement. However, the language in T.14. does not completely parallel the language of 49 CFR 173.433. Furthermore, Table 9 of 49 CFR 173.443 was not reproduced exactly in Part T, Table III.</p> <p>CRCPD SSR Part T, T.14.i., needs to reference the requirements of 49 CFR 173.443 or incorporate the 49 CFR 173.442 requirements and Table 9 exactly in order to meet the Compatibility Category B designation assigned to 10 CFR 71.87.</p>

SSR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					Comment revised from September 22, 2011, letter.
9	T.16.	10 CFR 71.89	2004-1	[B]	<p>Opening instructions</p> <p>In Part T, T.16. replace the reference to "10 CFR 20.1906(e)" with "D.1906e."</p> <p>CRCPD SSR Part T, T.16., needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 71.89.</p>
10	T.19.	10 CFR 71.97	2012-2	B	<p>Advance notification of shipment of irradiated reactor fuel and nuclear waste</p> <p>SSR Part T, T.19. has not been revised to address the revisions in RATS ID 2012-2, specifically: §71.97(a), §71.97(c)(1), §71.97(c)(3), §71.97(d)(4), §71.97(e), and §71.97(f)(1).</p> <p>CRCPD SSR Part T, T.19., needs to be revised in order to meet the Compatibility Category B designation assigned to 10 CFR 71.97.</p>
11	Appendix A Table A-1	Appendix A Table A-1	2004-1	[B]	<p>Table A-1</p> <p>Part T, Appendix A, Table A-1: the value for specific activity for "Te-132" should be corrected from "3.1 X 10⁴ TBq/g" to "1.1 X 10⁴ TBq/g."</p> <p>Part T, Appendix A, Table A-1, the entry for "U-230 (fast lung absorption)" provides footnotes (a) and (e). However, it should provide footnotes (a) and (d).</p> <p>Part T, Appendix A, Table A-1, footnote "(d)" provides the formula "UO₂(NO₃)₂" but it should be represented as "UO₂(NO₃)₂" to accurately reflect the chemical formula.</p> <p>CRCPD SSR Part T, Appendix A, Table A-1, needs to make the above changes in</p>

SSR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					order to meet the Compatibility Category B designation assigned to 10 CFR 71, Appendix A.
12	Appendix A Table A-2	Appendix A Table A-2	2004-1	[B]	<p>Table A-2</p> <p>Part T, Appendix A, Table A-2, footnote “(c)” provides the formulas “UF₆, UO₂F₂, and UO₂(NO₃)₂” but it should be represented as “UF₆, UO₂F₂, and UO₂(NO₃)₂” to accurately reflect the chemical formulas.</p> <p>Part T, Appendix A, Table A-2, footnote “(d)” provides the formulas “UO₃, UF₄, UCl₄” but it should be represented as “UO₃, UF₄, UCl₄” to accurately reflect the chemical formulas.</p> <p>Part T, Appendix A, Table A-2, footnote “(e)” states “other than those specified in (d) and (e) above” but should state “other than those specified in (c) and (d) above.”</p> <p>CRCPD SSR Part T, Appendix A, Table A-2 needs to make the above changes in order to meet the Compatibility Category B designation assigned to 10 CFR 71, Appendix A.</p>
The Following Comments are Editorial in Nature.					
1	T.4.c. and T.11.	10 CFR 71.15	2004-1	[B]	<p>Exemption from classification as fissile material</p> <p>The Part T, T.4.c., requirements are duplicated in T.11. with slightly different formatting and slight language differences. For clarity, and to avoid conflicts and duplication, one of these sections should be deleted.</p>
2	T.2.	10 CFR 71.4	2004-1	[B]	Definitions: “Unirradiated uranium”

SSR SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					The Part T definition of “Unirradiated uranium” provides long-hand written numbers (i.e. two thousand becquerels, fifty-four nanocuries). This is not consistent with the format/style for SSRs. For style consistency, the definition for “Unirradiated uranium” should provide numerical values, (i.e. 2×10^3 Bq) instead of long-hand written numbers (i.e. two thousand becquerels).
3	T.20.d.	10 CFR 71.101	2004-1	C	<p>Quality assurance requirements</p> <p>Part T, T.20.d., should refer to the requirements of 71.17(b) and 71.101(b); which would be T.7.b and T.20.b, respectively. When correcting a previous NRC comment, the “b” was correctly added to T.7. but was erroneously removed from T.20 in the latest revision of Part T. For clarity, T.20.d. should refer to “T.7.b and T.20.b.”</p>
4	Appendix A Table A-2	Appendix A Table A-2	2004-1	B	<p>Table A-2</p> <p>Part T, Appendix A, Table A-2, first column: some of the footnotes are placed in superscript such as “Th-234^b” whereas others are placed in parenthesis such as “Zr-93(b)”. The footnotes for the various entries in the first column should be in the same format for consistency and to avoid any confusion. (Note that the footnotes in Table A-1 were in parentheses.)</p>
5	Appendix A Table A-4	Appendix A Table A-4	2004-1	B	<p>Table A-4</p> <p>Part T, Appendix A, Table A-4, has only one footnote for the table, but this footnote is identified as “(3)” rather than “(1)”. To avoid confusion, since there is only one footnote for the table, it should be identified as “(1).”</p>